Impact of human resource accounting on managers decision makings in organizations
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ABSTRACT
The subject of human resource is an important factor to improve manager’s characteristic as world-class talent and devolution and empowerment of employees. In the twenty-first century the significance of human intellectual capital in most necessary than other capital in an organization. Humans determine the value of organization due to their skill and specialization. They play a vital role in an organization along with its physical properties and in investment. Managers spend a lot of money for educating and training their workers and employees in order to increase the efficiency of the organizations managers function is the key to success and to achieve this objective, they must review and evaluate human resource data. Managers without proper information cannot function and take proper decisions. Human resource accounting while accounting principles in an organization is to conduct basic research to the extent of the human resource accounting information which affect the employees personal performance in human resource accounting analysis, criteria and valuation of cost and manpower is the main resource in each company. Human resource accounting is main part of the social accounting and aims to provide information and evaluation of managers decision-making. This article shows the important role of human resource accounting of managers decision-makings in organizations and studies how managers can put the human resource value in balance sheet by different models and collecting primary data in making questionnaires of some selected company and contribution of managers of organization and how much human resource accounting affect on managers decision-makings.

Introduction
Human element is the most important input in any corporate enterprise. The investments directed to raise knowledge; skills and aptitudes of the work force of the organization are the investment in human resource. It helps management to frame policies for human resource. Human resource accounting is a process of identifying and measuring data about human resource. It means accounting of people\employees as an organizational resource. Managers involve measuring the cost incurred by organization to recruit, select, hire, train and develop human assets and value of people in the organization. Human resource accounting is one of the latest concepts adopted by Indian companies who follow human resource accounting spare in their annual reports for a detailed accounting of their human resource. Most organizations have realized that human resource as their most precious resources and many Indian companies have taken steps for the valuation of their human resource. Like: Infosys technologies valued its human resource in 1995-96 and BPL (bharat petroleum limited) limited and other companies which valued human resource is their assets.

Human resource accounting is an attempt to identify and report investment made in the resources of the organization that are not presently accounted under conventional accounting practices. (woddraff).

Flamholtz (1979) describes the human resource accounting paradigm in terms of the psycho-technical system.

The best use of human resource accounting maybe as a managerial tool to aid in making-decisions that will benefit or achieve the long-run strategic goals and profitability of the company. According to the PTS (psycho-technical system) approach, the two function of measurement are:
1) Process function in the process of measurement and
2) Numerical information from the numbers themselves.

In evaluating management and employees’ educational and training programs, management’s involvement is measurement processes which analyze these outlays as investment in human resource will likely result in management taking a long-term approach. Human resource accounting can play a crucial role in internal managerial decision-making and human resource accounting measures can be used to show that investment in a company result in long-term profit. (Bullen-2007).

When managers of human resource accounting measurement treating human resource as capital asset, they are more likely to make decisions that treat the company’s employees as long-term investment.

Due to the need of management for information for decision making, human resource accounting provides information that make managers work better and more efficiently use their human resource as much as possible, holding human resource bitterly and usefully.

Since up till now many definitions of human resource accounting have been presented and some of them are given below:
1) Human resource accounting is the process of diagnosis and provides information about human resource to facilitate in an organization’s management.
Human resource accounting provides information managers to help them make their human resource more effective. The total worth of the organization depends mainly on the skills of its employees and the service they render. Human resource accounting denotes just the process of quantification measurement of the human resource.

**Effect of the process of human resource accounting measurement in decision-making:**

As much as the measures themselves are relevant in managerial decisions, it is also useful to recognize that when managers go through the process of human resource accounting measurement treating human resource as capital asset, they are more likely to make decision that treat the company’s employees as long term investment of the company. Flamholtz (1979) describes human resource accounting paradigm in terms of the (PTS) (psycho-technical system) approach to organization measurement, where as the role of human resource accounting is to provide numerical measures, an even more important role is the measurement process itself. The human resource accounting measurement process as a dual function attempts to increase recognition that its capital is paramount. To the organization’s short and long-term productivity and growth.

**Measurement in human resource accounting:**

Human resource accounting may be measured in term of human resource cost or in terms of human resource value. According to flamholtz’s model for measurement of original human resource cost (1973,1977, p.59), human resource cost maybe explained in terms of the two major categories of acquisition costs and learning costs. Acquisition cost includes the direct costs of recruitment, selection hiring and placement, and the indirect cost of promotion or hiring from within the firm. Human beings are the dynamic elements of every organization. The success of any organization, to a great extent, depends upon the quality and caliber of the people working in it. Human resource has been given much priority in the present service sector since identifies importance. In order to qualify the talent, Skills and knowledge of employees or workforce various models were suggested. Also the impact of human resource accounting information on managers decision makings by mr. hermanison, likert, Pyle, lev & schwartz- that believed that human resource information can affect managers decision makings on organization.

So far, the study about human resource accounting information on manager’s decision makings has positive effect on financial statement and on share holders, investors, financial analysts and management of organization.

**Methods of measuring human resource:**

1. The historical cost method

   This method was used by Barry (1969) corporation that of traditional accounting bases to the attention of managers of organization. The cost of employees divided in two parts:
   A) Current cost
   b) Capital cost

2. Replacement of cost method:

   Replacement cost of human resource is the cost that would have to be incurred if present employees are to be replaced. For example if an employee were to leave today, several costs of recruiting, selection, hiring, placement, orientation, on the job training would have to be incurred in order to replace him.

3. Opportunity cost method:

   In this method, the human resource of organization has to be valued on the basis of the economist’s concept of opportunity cost which is value of benefit forgone by putting in to present value. This method consider for those employees which followed by managers of organization. In other word, employee who are rarely to be part of the organization’s human assets.

**The role of human resource accounting in management decisions:**

Efficient way of managing organizations, spatially in today’s word is very complex, involving much different aspect of collecting and processing information. So, what distinguishes the organization besides capital, technology, machinery and raw materials at their disposal, skill and efficient manpower.

Organizations achieve their goals, with accurate estimation of their resources with the help of human resource accounting system. Managers decision makings can be related to human resource in terms of both quantitative and qualitative assessment of efficacy and effectiveness of decisions for future activities determines. Here, human resource accounting is use as a measure for benchmark and index and acts of management decisions. Obtain accurate information and the cost of human resource and the cost of effectiveness of the processing organization and the decision of managers in attracting and developing the best interests of the organization plays an important role.

**Stochastic reward model:**

Stochastic rewards model was developed by Eric G. Flamholtz. This model identical some major variables that are help to determine the value of an individual to the organization. He determined the movement of employees from one organization to another as stochastic process this model is a direct way of measuring a person’s expected conditional value and expected realized value. It is based on the assumption that an individual generates value as he occupies and moves among organization of roles. Eric G. Flamholtz suggested different approaches to assess the value of human resource of the company in this model. In order to quantify human resource value the period any employee work in the organization. Use of this model necessitates the following information: 1) the value of each state, to the organization 2) estimates of person’s expected tenure in the organization. 3) Discount rate to be applied to the future cash flow.

**Lev and Schwartz model:**

This model determines present value of future. Earnings of a person is the capital value of person. This is a popular for calculating the value of human resource used by public sectors like SAIL (steel authority of Indian ltd) and (BHEL) (bharat heavy electrical ltd).

It is based future earnings of an employee till his retirement. Value of human assets is estimated for a person of a given annual earnings till retirement age it in years of (I) then the present value of his net income are:

$$V_r = \sum_{t=0}^{T} \frac{I(t)}{(1+r)^{t-r}}$$

Where:
- $V_r$ = value of an individual or human capital is value of a person by (r) years old
- $I(t)$ = anticipated annual income to the retirement age
- $r$ = discount rate specific to the person
- $t$ = retirement age
- $t-r$ = interval until retirement age

Lev and Schwartz in the year (1971) the economic value as present value an employee income over its useful life in this model were adjusted for the probability of an employees death. As per this valuation model of human resource accounting the following expression in used for calculating the expected value of a person’s human capital.
Human resource accounting practicing in Indian companies:

Even though, many benefits have contributed by human resource accounting, yet its development and application in different industries has not been encouraging. Because Indian companies act 1956, does not provide any scope for showing any information about human resource in financial statement the companies, who are presently reporting human- asset valuation, include:

1) Hindustan petroleum corporation ltd (HPCL)
2) Cement corporation of India (CCI)
3) Infosys technologies (Ltd)

Human resource valuation by Hindustan petroleum corporation ltd (HPCL):

Hindustan petroleum corporation limited fortune 500 company, is one of the major integrated oil refining and marketing company in India.

It is a mega public sector under taking with navratna status. HPCL uses lev and Schwartz model for the purpose of computation of value of human resource.

HPCL considers human dimension as the key to organization’s success. Several initiatives for development of human resources to meet new challenges in the competitive business environment have gained momentum. HPCL recognizes the value of its human assets who are committed to achieve excellence in all spheres. The human resource profile given below in table shows that HPCL has a mix of energetic youth and experienced seniors who harmonize the efforts to achieve the corporation’s goals.

<table>
<thead>
<tr>
<th>Age</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>Above 50</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of employees</td>
<td>1,609</td>
<td>1,295</td>
<td>4,043</td>
<td>4,279</td>
<td>11,226</td>
</tr>
<tr>
<td>Management</td>
<td>1,379</td>
<td>885</td>
<td>1,490</td>
<td>1,378</td>
<td>5,132</td>
</tr>
<tr>
<td>Non management</td>
<td>230</td>
<td>410</td>
<td>2,553</td>
<td>2,901</td>
<td>6,094</td>
</tr>
<tr>
<td>Average age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45</td>
</tr>
</tbody>
</table>

Human resource accounting in Infosys technologies limited:

Infosys is a leading information technology company that was incorporated in 1981 as an Infosys consultant private limited. In 1992, the company was converted into a public limited company. In the year 1995-96, it became the first software company to value its human resource in India. Lev and Schwartz model has been used for the purpose of valuation of human resources of the organization. And valued its human resources assets at Rs 1.86 billion. Infosys had always given utmost importance to the role of employees in contributing to the company’s success.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of management employees</th>
<th>No. of non-management employees</th>
<th>HR value (Rs in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2009</td>
<td>11246</td>
<td>1901</td>
<td>13147</td>
</tr>
<tr>
<td>2009-2010</td>
<td>11291</td>
<td>4363</td>
<td>15654</td>
</tr>
<tr>
<td>2010-2011</td>
<td>11781</td>
<td>6712</td>
<td>18493</td>
</tr>
<tr>
<td>2011-2012</td>
<td>14105</td>
<td>7307</td>
<td>21412</td>
</tr>
</tbody>
</table>

Source: annual reports of HPCL from 2008-2012

Infosys service offering span business and technology consulting, application services, system integration, product engineering, custom software development, maintenance, reengineering, independent testing and valuation services, IT infrastructure services and business process outsourcing Infosys has a global footprint with offices in 23 countries and development centres in India, china, Australia, the U.K, Canada and Japan. It has employed 91,187 highly educated and skilled employees that is why, the HRA has the importance in ITL.

It becomes the first software company to value its human resource in India.

Annual reports of Infosys and HPCL companies 2008-09 to 2011-12:

The total value of HR was 13147 in the year 2008 to 2009 which reached to 21,412 in the year 2011-2012

Showing an increasing trend due to the adoption of the computerized system. It is indicated that the number of management employee was more than the non-management employees during the period from 2008-2011.

Table 2: employees and value of human resource of Infosys for 2008-09 to 2010-11

<table>
<thead>
<tr>
<th>Years</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO of employees</td>
<td>104850</td>
<td>113896</td>
<td>130820</td>
</tr>
<tr>
<td>HR value (Rs in crores)</td>
<td>102133</td>
<td>113287</td>
<td>135105</td>
</tr>
</tbody>
</table>

Source: annual reports of Infosys company for 2008-09 to 2010-11

The above table clearly indicates the strength of employees of Infosys company. The value of the human resource also disclosed in the table for different years. The value of human resource and number of employees are increasing in 2008-09 to 2010-11

In Infosys company during the period of study 2008 to 2011 the human resource accounting information in the annual reports of Infosys only a part of the supplementary information and Infosys only disclosed human resource value in the social balance sheet.

Findings of the study:

With a view to evaluate the human resource accounting practices in two companies, HPCL and ITL (Infosys technologies LTD) the data collected from the website and annual reports has been analyzed by using Lev and Schwartz model. Disclosure of human resource accounting, form of presentation and usefulness in human resource decision-making. HRA indicated to organization’s managers that the correct way of decision for employees are valuable resource in organization and personal decision should consider the value and cost of manpower is taken.

The annual reports of Infosys company from 2008-09 to 2010-11 indicated that the No employees and the value of human resource in their annual reports are increasing every years.

ITL was found that the valuation of human resource for 3 years continuously without gap. It has disclosed human resource valuation in its annual report in the form of supplementary statement as well as a part of balance sheet.

Annual reports in HPCL from 2008-09 to 2011-12 to found out that the number of management employees and non-management are increasing every year as well as value of human resource and indicate that number of management employees more than non management employees.

Conclusion:

The study of the HRA system of the two organizations reveals that most of disorganizations applied the Lev and Schwartz model for valuation of their human resource this model calculates the present value of human resource in the term of the present value of future earning of human resource. We face problem because different organizations used different approaches for valuation of human resource. HRA has a great potential for managers decision- makings in the modern age of professionalization and particularly in the case of labour intensive service where human resource play a major role.
Though they are certain drawbacks in the model employees by companies in India to value their human resource by reporting HRA in their annual reports.

Hence, considering the great significance of HRA proper initiation should be taken by the government along with that other professional and accounting bodies both at the national and international levels for the measurement and reporting of such valuable assets.

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